

Remarks

Of the originally filed claims 1-26, claims 4, 10-13 and 19-20 are previously canceled. No new claims are added by this paper. Therefore, as of this paper, claims 1-3, 5-9, 14-18 and 21-26 are pending in the application and presented for Examiner Tentoni's consideration.

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the following remarks is respectfully requested.

By way of section 1 of the Office Action mailed August 29, 2006, the previous rejection under 35 U.S.C. §102(b) over Weng et al. U.S. Pat. No. 5,762,857 or over GB 1,244,753 (hereinafter, "GB'753") (set forth in the previous Office Action mailed January 20, 2006), was withdrawn with respect to the claims.

By way of sections 2-4 of the Office Action mailed August 29, 2006, the instant application was provisionally rejected for alleged non-statutory obviousness-type double patenting over two co-pending patent applications, USSN 10/325,140 and USSN 10/694,420, both assigned to the assignee of the instant application. Because all three applications are pending and no allowable claim scope has been determined for any of the three applications involved, Applicants respectfully request that these provisional rejections be held in abeyance with respect to the present application until such time as the presence of allowable subject matter is indicated.

By way of sections 5-7 of the Office Action mailed August 29, 2006, claims 1-3, 5-9, 14-18 and 21-26 (all of the pending claims) were rejected under 35 U.S.C. §103 as allegedly being obvious over GB'753 in view of newly-cited Snow et al. U.S. Pat. No. 2,863,493 (hereinafter, "Snow et al."). This rejection is respectfully **traversed** to the extent applicable to the currently pending claims.

The invention as claimed in independent claim 1 is directed to a method of making a nonwoven web, the method including the steps of providing a source of fibers, subjecting the fibers to an electrostatic charge, deflecting the fibers with a non-contacting deflecting device, the non-contact deflecting device comprising an air jet deflector providing discrete jets of air; and collecting the fibers on a moving forming surface to form the nonwoven web. The invention as claimed in independent claim 14 is directed to apparatus for forming a fibrous

nonwoven web, the apparatus including a source of fibers, a device for applying an electrostatic charge to the fibers, a non-contacting fiber deflecting device adapted to affect the fibers while the fibers are under the influence of the applied electrostatic charge, the non-contact deflecting device comprising an air jet deflector for providing discrete jets of air, and a forming surface for collecting the fibers as a fibrous nonwoven web.

Turning to GB `753, this reference relates to a process and apparatus for making a nonwoven web material. GB `753 teaches use of a longitudinal draw units (please see, e.g., GB `753 at Figs. 1-3 and 7) such as the slot-type draw units utilized by Applicants. In these types of draw units, the extruded bundle of fibers is spread out or elongated width-wise into a curtain of fibers (please see item 110, Fig. 7 of GB `753), rather than being drawn as a cylindrical bundle of fibers. It is specifically stated in GB `753 that their disclosure provides for nonwoven webs having uniform basis weight (please see, e.g. GB `753 at page 1 lines 29-36). It was stated in the Office Action that GB `753 teaches all of the Applicants' claims elements, except that it does not teach a non-contacting deflecting device providing discrete jets of air.

The disclosure of Snow et al. relates to a method and apparatus for forming fibers from heat softenable mineral materials such as glass, slag, or fusible rock (see, e.g., Snow et al. at col. 1 lines 15-28). The fibers are formed into a "beam" or generally cylindrical formation of fibers and collected on a mat (see, e.g., Snow et al. at col. 1 lines 64-71). Snow et al. utilize an air nozzle which can be shaped elongated and can have a plurality of openings (see, e.g., Snow et al. at col. 6 line 69-col. 7 line 6, and see Fig. 7). This nozzle is employed by Snow et al. in order to provide a blast of air that is effective to partially collapse the beam of fibers, and is said to provide a reduction in the disruption of the beam of fibers into strings of fibers (see, e.g., Snow et al. at col. 7 lines 7-15).

It was stated in the Office Action that this nozzle described by Snow et al. supplies the element missing in the disclosure of GB `753 (non-contacting deflecting device providing discrete jets of air) and it was stated in the Office Action in the sentence bridging pages 4 and 5 that it "would have been obvious to one of ordinary skill in the art at the time the invention was made in GB 1,244,753 A in view of Snow et al principally in order to provide a nonwoven web having a desired and uniform thickness."

According to MPEP §2143, in order to establish a prima facie case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicants submit that there is no logical suggestion or motivation to justify a combination or modification of the cited art references. The references cited in the Office Action provide no impetus to arrive at the Applicants' claimed invention, especially in view of the remarks made above regarding the GB `753 reference and the Snow et al. reference. Therefore, one skilled in the art, even if aware of the GB `753 reference and the Snow et al. reference, would not have combined the selected portions of these and arrived at the claimed invention. First, note that there is no deficiency noted by GB `753 vis-à-vis the thickness uniformity of their nonwoven webs – to the contrary, they teach that their webs have a uniform basis weight. In case it is subsequently suggested that basis weight and thickness are not equivalent parameters – this is true – however, for a uniform basis weight web to be provided but having a non-uniform web thickness, one must then also posit non-uniform web density. This deficiency in the nonwoven webs is not anywhere hinted by the reference.

Furthermore, the nozzle taught by Snow et al. for use in their glass fiber process is provided for the purpose of collapsing the beam of fibers – in other words, for purposes of compacting the beam of fibers more closely together, and is used to avoid individualization of the fibers. There would be no desire on the part of one skilled in the art utilizing a slot draw unit, to collapse their fiber curtain into a cylinder and there would be no desire by one such to reduce “disruption” of the fiber curtain into individual fibers. To the contrary, please note GB `753 at page 3 lines 121-127 where it is stated the fibers are to be “well separated” (emphasis is added).

Finally, please note that the disclosure of Snow et al. was already recognized and described by the inventors of GB `753. However, as stated in GB `753 itself, the disclosure of Snow et al. was not looked upon favorably in GB `753 and it was stated to fail to give “any

indication of the filament alignment in the final product”, and it was further stated in GB `753 that the disclosure of Snow et al. failed to “teach one skilled in the art the steps and conditions required” for the process described in GB `753 (please see GB `753 at page 1, lines 37-49).

For these reasons, Applicants respectfully submit that one skilled in the art would not be motivated to combine the nozzle taught by Snow et al. with the disclosure of GB `753, and therefore respectfully request that the rejection under 35 U.S.C. §103 over GB`753 in view of Snow et al. be withdrawn.

Furthermore, with respect to their dependent claims, Applicants also respectfully submit that for at least the reasons indicated above relating to the corresponding independent claims, the pending dependent claims patentably define over the GB `753 and Snow et al. references cited. However, Applicants also note that the patentability of the dependent claims does not hinge on the patentability of independent claims. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims. As a specific example, the references do not appear to disclose the feature of the air jet deflector providing discrete jets or air, wherein the discrete jets of air are perturbed, such as required by claim 5. Nor, for example, do the references appear to disclose the feature wherein the air jet deflector is a target electrode for the charged pin array providing the electrostatic charge, as in claims 6, 21, 22. Nor, for example, do the references appear to disclose the feature wherein the discrete air jets are angled with respect to the machine direction at an angle of about 15 degrees to about 60 degrees, as in claim 8. Nor, for example, do the references appear to disclose the feature wherein the charged pin array for providing the electrostatic charge is located upon one non-contacting deflection device, as in claim 26.

In the Office Action mailed August 29, 2006, Applicants’ similar arguments with respect to these dependent claims were dismissed by stating simply that these combinations of features would have obvious to one of ordinary skill in the art in order to provide a nonwoven web having a desired and uniform thickness. Applicant submit that these dependent features as recited above are quite distinct, and, from a reading of the cited art, do not appear to be features derivable from the cited art, nor have these features been

Appl. No. 10/687,006
Reply dated December 29, 2006
Reply to Office Action of August 29, 2006

shown to be features which were merely within the skill of one skilled in the art at the time the invention was made. Therefore, Applicants respectfully submit that merely dismissing these features as "obvious" without anything in the way of evidence is conclusory, and is in error. For these reasons also, Applicants respectfully request that the rejection under 35 U.S.C. §103 over GB'753 in view of Snow et al. be withdrawn.

Applicants respectfully submit that the claims of the application are in allowable condition and favorable action thereon is respectfully requested. The Examiner is encouraged to call the undersigned at his convenience if any unresolved issues should be believed to remain.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at: 770-587-8908.

Respectfully submitted,

THOMAS W. BROCK ET AL.

By: /Robert A. Ambrose/
Robert A. Ambrose
Registration No.: 51,231

CERTIFICATE OF TRANSMISSION

I, Robert A. Ambrose, hereby certify that on December 29, 2006, this document is being transmitted to the United States Patent and Trademark Office EFS-Web System.

By: /Robert A. Ambrose/
Robert A. Ambrose